

stud, preventing the operator from turning the nut more than is necessary in tightening or loosening.

The adjustable stop shown in Fig. 22 meets practically all requirements placed on an adjustable stop. It will not slip back under the pressure of the stop; it will not slip in tightening; it is dirt-proof; all the parts form integral parts of the jig; and it will not become loose, due to vibration of the machine, or spring down under the pressure of the cut, due to unevenness of the tables of the machines on which the fixture is used. It can be rapidly operated and is so sensitive that the operator feels instantly when plunger *G* is in contact with the work.

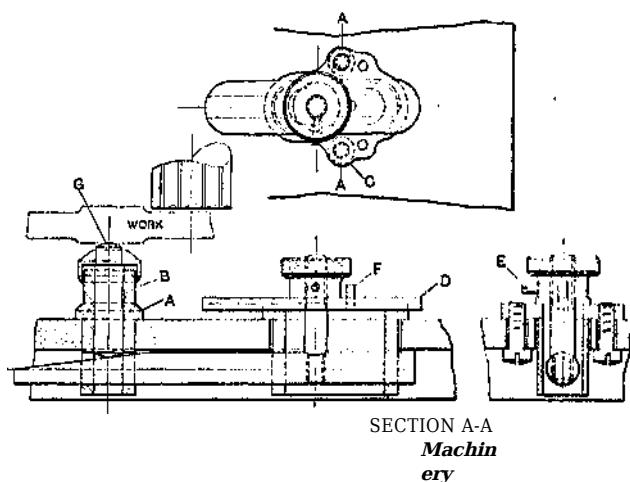


Fig. 22. Principle of the Final Improvement in the Adjustable Wedge Stop

The only objection to this design is that so much of

the metal of the base has been cut away that it is seriously weakened, and the design shown in Fig. 23 is superior in this respect. In the making of the fixture, difficulties were also encountered in aligning the holes in bushing *A* with the holes in casting *C*, Fig. 22. This was remedied by making the bushing an easy fit and adding a small pin *D* and the round-head screw *C*, Fig. 23, to keep the bushing from turning or working loose. The wedge was also jointed and made in two parts, as indicated, in order to take care of the variations that might occur in drilling